

IN THE CLAIMS:

The status and content of each claim follows.

1-12. (cancelled)

13. (currently amended) A method of forming an electrolyte, comprising:  
removably coupling a perimeter support to a temporary substrate;  
electrodepositing a structural material and an electrolyte material to form an  
electrolyte composite film on said temporary substrate such that a perimeter of said film is  
supported by said perimeter support; and

~~The method of claim 1, further comprising~~ electrodepositing a layer of ions on said electrolyte composite film.

14. (original) The method of claim 13, wherein said layer of ions comprises at least one of perfluorosulfonate ionomers or sulfonate polyetherketones.

15. (original) The method of claim 13, wherein said electrodepositing of said layer of ions comprises electrolytic deposition.

16. (original) The method of claim 13, wherein electrodepositing said layer of ions seals said electrolyte composite film.

17. (previously presented) A method of forming an electrolyte, comprising:  
removably coupling a perimeter support to a temporary substrate; and

electrodepositing an electrolyte composite film on said temporary substrate such that a perimeter of said film is supported by said perimeter support;

wherein said electrolyte composite film and said perimeter support comprise an electrolyte assembly and further comprising removing said electrolyte assembly as an integral unit from said temporary substrate.

18. (original) The method of claim 13, wherein electrodepositing said electrolyte composite film comprises electrophoretic deposition and electrodepositing said layer of ions comprises electrolytic deposition.

19-61. (cancelled)

62. (currently amended) A method of forming a fuel cell electrolyte, comprising: disposing a temporary substrate in a solution already comprising polymer units; electrodepositing said polymer units on said temporary substrate so as to form said fuel cell electrolyte on said temporary substrate; and

~~The method of claim 57, further comprising~~ electrodepositing a layer of ions on said electrolyte composite film, wherein said layer of ions is thinner than said fuel cell electrolyte.

63. (previously presented) The method of claim 62, wherein said layer of ions comprises at least one of perfluorosulfonate ionomers or sulfonate polyetherketones.

64. (previously presented) The method of claim 17, further comprising electrodepositing a layer of ions on said electrolyte composite film.

65. (previously presented) The method of claim 64, wherein said layer of ions is thinner than said electrolyte composite film.

66. (previously presented) The method of claim 64, wherein said layer of ions comprises part of said electrolyte assembly and is removable as part of said integral unit from said temporary substrate.

67. (previously presented) The method of claim 17, wherein said electrolyte composite film conducts ions when moisture is present.

68. (previously presented) The method of claim 17, further comprising forming a cathode and anode on opposite sides of said integral unit

69. (previously presented) The method of claim 17, wherein said electrodepositioning is performed by placing said temporary substrate in a solution already comprising polymer units and attracting those polymer units to said temporary substrate using an electric field.

70. (previously presented) The method of claim 17, wherein said electrolyte composite film comprises a structural material and an electrolyte material.

71. (previously presented) The method of claim 70, wherein said electrolyte material comprises perfluorosulfonate ionomer particles.

72. (previously presented) The method of claim 70, wherein said structural material comprises ceramic particles.

73. (cancelled)